



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

2/1

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,642	07/24/2003	Kazuhiko Hanawa	056205.52633US	9723

7590 09/19/2005
Crowell & Moring, LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300

EXAMINER

SOTOMAYOR, JOHN B

ART UNIT	PAPER NUMBER
----------	--------------

3662

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,642

Applicant(s)

HANAWA ET AL.

Examiner

John B. Sotomayor

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-11 and 14 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-8, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ 24 JUL 03
26 FEB 04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on July 26, 2002 and July 17, 2003. It is noted, however, that applicant has not filed a certified copy of either of the applications as required by 35 U.S.C. 119(b).

Information Disclosure Statement

2. The information disclosure statement filed July 24, 2003 has been entered and considered. An initialed copy of the PTO-1449 by the Examiner is attached.
3. The information disclosure statement filed February 26, 2004 has been entered and considered. An initialed copy of the PTO-1449 by the Examiner is attached.

Drawings

4. The drawings filed on July 24, 2003 are objected to.
5. Figures 14-17 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

Art Unit: 3662

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

It is apparent from the specification that other drawings depict the prior art. Any other drawings illustrative of the prior art should also be labeled -- Prior Art--.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. Claims 1 is rejected under 35 U.S.C. 102(a) and/or (e) as being anticipated by Natsune ('589).

The claim is considered met by Natsune ('589) who discloses a radio wave radar system including, inter alia, control means for switching modulation means based on determined parameters from an object, e.g. distance, relative speed, etc.

Natsune ('589) discloses:

The timing controller 30 produces the timing signal P in the form of a train of pulses arrayed at an interval or cycle of $1/f_x$. The timing controller 30 also produces the mode signal M whose level varies cyclically from a first level indicating a first modulation mode to a second level indicating a second modulation mode and back to the first level. The second level is kept for a period of time required to output as many pulses as samples in each channel (the number of samples Dpc in each channel in this embodiment is 512). The first level is kept for a period of time required to output $N_c \cdot \text{times} \cdot D_{pc}$ pulses. The cycle $1/f_x$ is set to a switching cycle of the antenna switch 22 or a conversion cycle of the A/D converter 28, whichever is the shorter (200 ns in this embodiment). In the following discussion, the first and second modulation modes will also be referred to as an azimuth measuring mode and a distance measuring mode, respectively.

Natsune ('589) also discloses:

The signal processor 34 produces the modulation command signal so as to change the sweep time between the distance measuring mode and the azimuth measuring mode. The sweep time in the distance measuring mode (i.e., the second modulation mode), which will be referred to as T2 below, is set to $D_{pc} \cdot \text{times} \cdot 1/f_x$. The sweep time in the azimuth measuring mode (i.e., the first modulation mode), which will be referred to as T1 below, is set to $N_c \cdot \text{times} \cdot D_{pc} \cdot \text{times} \cdot 1/f_x$. In the distance measuring mode, the signal processor 34 processes samples of the beat signal B inputted from the A/D converter 28 and determines the distance to and relative speed of a target.

Allowable Subject Matter

8. Claims 9-11 and 14 are allowed.
9. Claims 2-8, 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

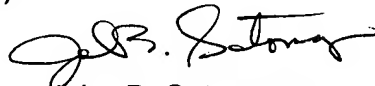
Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art show various radar systems.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Sotomayor whose telephone number is 571-272-6978. The examiner can normally be reached on Mondays to Fridays from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom H. Tarcza, can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John B. Sotomayor
Primary Examiner
Art Unit 3662